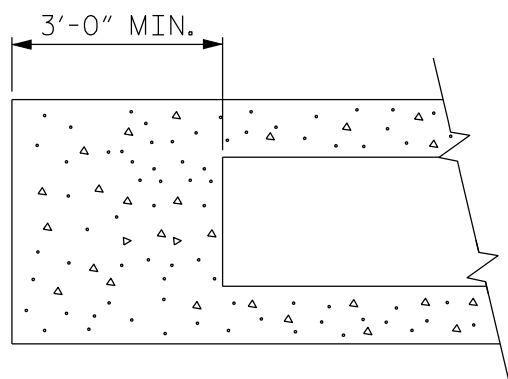


SHEAR KEY DETAIL



TYP. LONGITUDINAL SECTION

FOR APPROX. MAX. SPAN FOR HL-93,
SEE FIGURE 11-3

18" CORED SLAB

AREA: 483.4 in.²
3.3568 ft.²

WEIGHT: 3.3568 X 150 = 504 lbs/ft.

$I_{xx} = 16289 \text{ in.}^4$ $I_{yy} = 57817 \text{ in.}^4$

$W = 3.00 \text{ ft.}$ $J = 36880 \text{ in.}^4$

$* = 15.00 \text{ in.}$ $C_T = 9.080 \text{ in.}$

$H = 18.00 \text{ in.}$ $C_B = 8.920 \text{ in.}$

$D = 10.00 \text{ in.}$ $S_T = 1794 \text{ in.}^3$

$S_B = 1826 \text{ in.}^3$

21" CORED SLAB

AREA: 522.3 in.²
3.6268 ft.²

WEIGHT: 3.6268 X 150 = 544 lbs/ft.

$I_{xx} = 25390 \text{ in.}^4$ $I_{yy} = 62796 \text{ in.}^4$

$W = 3.00 \text{ ft.}$ $J = 52094 \text{ in.}^4$

$* = 16.00 \text{ in.}$ $C_T = 10.596 \text{ in.}$

$H = 21.00 \text{ in.}$ $C_B = 10.404 \text{ in.}$

$D = 12.00 \text{ in.}$ $S_T = 2396 \text{ in.}^3$

$S_B = 2440 \text{ in.}^3$

24" CORED SLAB

AREA: 630.3 in.²
4.3768 ft.²

WEIGHT: 4.3768 X 150 = 657 lbs/ft.

$I_{xx} = 38910 \text{ in.}^4$ $I_{yy} = 74460 \text{ in.}^4$

$W = 3.00 \text{ ft.}$ $J = 70159 \text{ in.}^4$

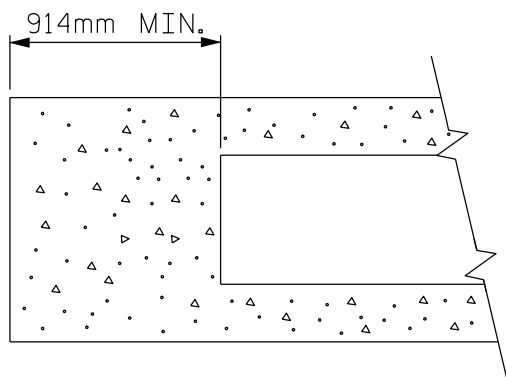
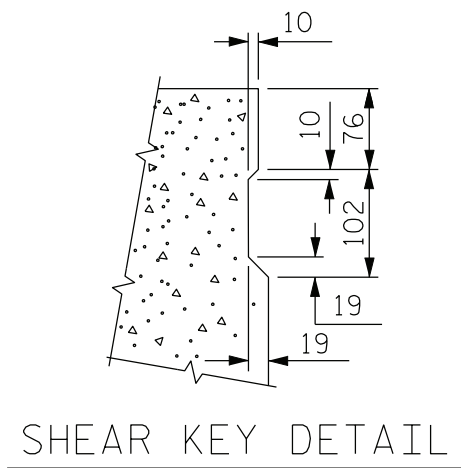
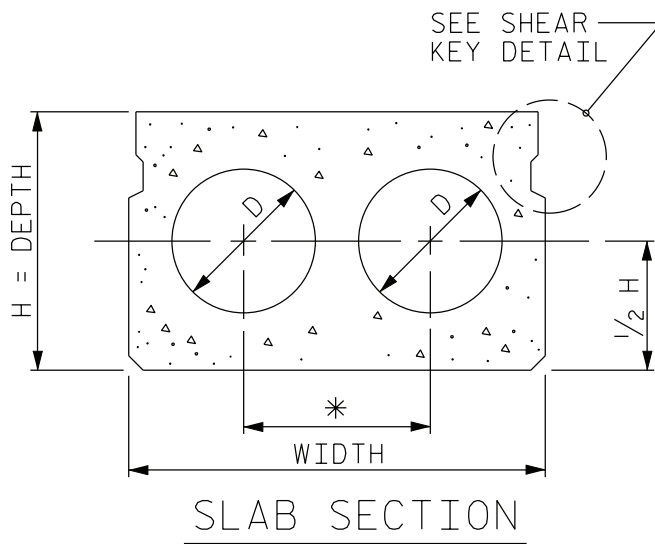
$* = 16.00 \text{ in.}$ $C_T = 12.097 \text{ in.}$

$H = 24.00 \text{ in.}$ $C_B = 11.903 \text{ in.}$

$D = 12.00 \text{ in.}$ $S_T = 3216 \text{ in.}^3$

$S_B = 3269 \text{ in.}^3$

CORED SLAB PROPERTIES



FOR APPROX. MAX. SPAN FOR HL-93,
SEE FIGURE 11-3

457mm CORED SLAB	
AREA: $311.9 \times 10^3 \text{ mm}^2$ 0.3119 m ²	
WEIGHT: $0.3119 \times 23.6 = 7.36 \text{ kN/m}$	
$I_{XX} = 67.8 \times 10^8 \text{ mm}^4$	$I_{YY} = 240.7 \times 10^8 \text{ mm}^4$
$W = 914 \text{ mm}$	$J = 153.5 \times 10^8 \text{ mm}^4$
$* = 381 \text{ mm}$	$C_T = 230.6 \text{ mm}$
$H = 457 \text{ mm}$	$C_B = 226.6 \text{ mm}$
$D = 254 \text{ mm}$	$S_T = 29.4 \times 10^6 \text{ mm}^3$
	$S_B = 29.9 \times 10^6 \text{ mm}^3$
533mm CORED SLAB	
AREA: $337.0 \times 10^3 \text{ mm}^2$ 0.3370 m ²	
WEIGHT: $0.3370 \times 23.6 = 7.95 \text{ kN/m}$	
$I_{XX} = 105.7 \times 10^8 \text{ mm}^4$	$I_{YY} = 261.4 \times 10^8 \text{ mm}^4$
$W = 914 \text{ mm}$	$J = 216.8 \times 10^8 \text{ mm}^4$
$* = 406 \text{ mm}$	$C_T = 269.1 \text{ mm}$
$H = 533 \text{ mm}$	$C_B = 264.3 \text{ mm}$
$D = 305 \text{ mm}$	$S_T = 39.3 \times 10^6 \text{ mm}^3$
	$S_B = 40.0 \times 10^6 \text{ mm}^3$
610mm CORED SLAB	
AREA: $406.6 \times 10^3 \text{ mm}^2$ 0.4066 m ²	
WEIGHT: $0.4066 \times 23.6 = 9.60 \text{ kN/m}$	
$I_{XX} = 162.0 \times 10^8 \text{ mm}^4$	$I_{YY} = 309.9 \times 10^8 \text{ mm}^4$
$W = 914 \text{ mm}$	$J = 292.0 \times 10^8 \text{ mm}^4$
$* = 406 \text{ mm}$	$C_T = 307.3 \text{ mm}$
$H = 610 \text{ mm}$	$C_B = 302.3 \text{ mm}$
$D = 305 \text{ mm}$	$S_T = 52.7 \times 10^6 \text{ mm}^3$
	$S_B = 53.6 \times 10^6 \text{ mm}^3$

CORED SLAB PROPERTIES

FIGURE 6 – 81 M